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EXAMINER

COLAIANNI, MICHAEL

ART UNIT	PAPER NUMBER
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1731

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/075,378	Applicant(s) SNAIDR ET AL.	
	Examiner Michael P Colaianni	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/284,633.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ----- | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 39-44 of U.S. Patent No. 6371127. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "predetermined porosity" claimed in claim 39 of the patent would obviously produce the same reduced free-burn rate and minimization of sidestream smoke claimed in claim 1 of the application.

Claims 10-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8-11, 19-22 of U.S. Patent No. 6371127. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "predetermined porosity" claimed in claim 1 of the patent would obviously produce the same features claimed in claims 10-11 of the application. Also, claim 2 of the patent states that the porosity minimizes sidestream smoke and reduces the free-burn rate.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 18, "said tube" is of confusing antecedent basis with the "tubular element" and the "first inner tube".

Claim 5, line 2, "tube interior surface" is of confusing antecedent basis with the "tubular element" and the "first inner tube".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kijowski et al. WO 95/34226 in view of Ferka 4852590, Romano 3502087 and Di Rubbio 2499733.

Kijowski et al. teach a device comprising: a non-combustible porous tubular element encasing an effective length of a tobacco charge of a cigarette located in said tubular element (Fig. 1, ref. no. 2), said tubular element having an open end adjacent such cigarette distal end to permit lighting of such cigarette distal end and permits ingress of air (page 8, lines 1-4, the cigarette is lighted and during the lighting air is permitted to enter); and said tubular element having a means for both minimizing sidestream smoke emission from a burning tobacco charge and reducing free-burn rate of such burning tobacco charge to increase number of puffs from such burning tobacco charge, said means for minimizing sidestream smoke and reducing free-burn rate comprising a predetermined porosity for said tubular element along at least its length which encases such effective length of a tobacco charge, where said predetermined porosity for said tubular element; retains at least some oxygen deprived combustion gases within said tubular element to minimize release of smoke particles through said openings and restricts inward flow of air to reduce free-burn rate of a cigarette (page 8, lines 9-15, page 15, lines 15-21).

As to claim 5, Kijowski et al. also teach an annular space is formed between the cigarette and the tubular element (Fig. 1, ref. no. 2 and 7). Moreover, Kijowski teaches that the the annular space has a distance of approximately 2 mm (page 15, lines 4-5,

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page 6, lines 1-2, the tubular element has a diameter of approximately 8 mm and the cigarette has a diameter of approximately 6 mm).

As to claim 2, Kijowski et al. also teach the cigarette used has a diameter of 4-6 mm (page 6, lines 1-2).

As to claims 6-7, Kijowski et al. also teach using an inherently unsmokable cigarette which becomes smokable when inserted in the tube (page 6, lines 1-2, Kijowski et al. uses a cigarette with the same dimensions as applicant and so Kijowski et al.'s cigarette must inherently have the same inherently unsmokable properties as applicant's cigarette).

As to claim 8, Kijowski et al. teach that the end adjacent the distal end of the cigarette may be open (Fig. 3, ref. no. 26).

However, Kijowski does not teach using a filter tip having the claimed characteristics of claim 1.

However, Ferka teaches that it is known to use a baffled filter insert with a cigarette (Fig. 1). Moreover, Ferka teaches using a filter tip that attaches to a cigarette via a central bore (Fig. 4, ref. no. 2, 7, 8); the central bore is in communication with a first inner tube (Fig. 4, ref. no. 2, 7); the first inner tube leads to a closed end (Fig. 4, ref. no. 7, 9); and an annular sleeve being provided inside of the tube (Fig. 4, ref. no. 7).

Moreover, Romano teaches using a filter tip that attaches to a cigarette via a central bore (Fig. 2, ref. no. 18, the sheath 18 has a central bore that attaches to the cigarette); the central bore is in communication with a first inner tube that leads to a first filter material (Fig. 1, ref. no. 34); the first inner tube leads to a closed end (Fig. 1, ref. no. 28); and an annular sleeve being provided inside of said tube (Fig. 1, ref. no. 24 and

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22, while it is noted that applicant's filter tip has the annular space "outside" of the main tube, it would be an obvious design change in view of Romano to merely reverse Romano's flow pattern to achieve such an annular space outside of the tube). Romano also teaches using an outer tubular filter along the tubular central bore (Fig. 1, ref. no. 34). Thus, Romano's filter tip is the same structure as taught by Ferka with the exception of the outer tubular filter. It would have been obvious to use a tubular filter with Ferka's invention to provide added filtration and removal of the toxic material in tobacco smoke.

Di Rubbio teaches that it is well known have a filter tip with an annular shoulder to support an outer annular tube (Fig. 2, ref. nos. 7, 9, 10, 20). Di Rubbio also teaches placing a filter plug down stream of an annular space in the filter tip (Fig. 2, ref. no. 4 and 12, the space for holds a filter plug which is positioned down stream of annular space 12). It would have been prima facie obvious to combine Di Rubbio's outer shoulder for supporting the tube with Ferka's filter piece to provide a means for catching the ashes of the spent cigarette. Also, using an additional filter plug would have been obvious to provide added filtration capability to remove the toxic material from the tobacco smoke.

It would have been prima facie obvious to combine Di Rubbio's teaching of using a filter plug downstream of annular space and the annular shoulder, Romano's annular filter covering and Ferka's concentric bore cigarette filter with Kijowski et al.'s smoking device because doing so would provide added filtration capabilities and also to prevent undesirable side-stream smoke.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kijowski et al. WO 95/34226 in view of Ferka 4852590, Romano 3502087 and Di Rubbio 2499733 as applied to claim 1 and in further view of Romano 3502087.

Kijowski et al. in view of Romano, Di Rubbio and Ferka teach applicant's claimed invention. See the 103(a) rejection above for Kijowski et al. in view of Romano, Di Rubbio and Ferka's teachings. However, Kijowski in view of DiRubbio and Ferka do not teach using a second tube of filter material or what the filter materials or the material from which the filter is made.

However, Romano teach using paper which is a cellulosic material. Moreover, it would have been obvious to use a second tubular filter with Romano's filter device to provide a greater degree of filtration and harmful smoke constituent removal. Moreover, the Examiner take Official Notice that it is well known use filtration materials with catalytic substances therein. Using such a catalytic saturated material would have been obvious because doing so would allow for a more efficient breakdown and removal of the harmful smoke constituents. Also, Romano teaches that filter material is impregnated with the usual filter materials. Impregnating with a catalytic material with the filter material would have been obvious.

It would have been prima facie obvious at the time the invention was made to combine Romano's additional teachings with Kijowski in view of Romano, Di Rubbio and Ferka's device for filtering smoke because doing so would provide a smoking

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device with improved filtration to remove many of the unwanted and undesired toxic smoke material.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kijowski et al. WO 95/34226 in view of Ito 4915117.

Kijowski et al. substantially teaches applicant's claimed invention. See the §103(a) rejection above for Kijowski et al teachings. However, Kijowski et al. do not teach using a ceramic tubular member.

However, Ito teaches using ceramic fibers to form a tubular member to surround and support a cigarette during smoking (col. 6, lines 19-20). Moreover, Ito teaches providing a ceramic precursor material that is heat treated to provide pores in the ceramic material (claim 5, the paper materials are thermally decomposed which obviously leaves a void and thus provides a porous ceramic material).

It would have been prima facie obvious at the time the invention was made to combine Ito's teaching of using ceramic fibers and other binders with Kijowski et al.'s smoking device in order to provide a tubular member with better insulative properties and better non-combustibility. Kijowski et al. teach using a mineral filler to provide thermal mass to reduce the temperature of the cylinder wall to less than 150°C (page 15, lines 18-21). In view of Kijowski et al.'s recognition to use mineral filler, it would have been obvious to use ceramic fiber, a mineral filler that is well known for its insulative properties.

Allowable Subject Matter

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art examined taught or fairly suggested a device for minimizing cigarette sidestream smoke and reducing free-burn rate of a burning cigarette which comprises a non-combustible tubular member with a distal end which is left open during smoking and the tubular member having a predetermined porosity which minimizes sidestream smoke emission from a burning tobacco charge and reduces the free-burn rate of such burning tobacco charge such that the predetermined porosity retains around a burning ember of a cigarette oxygen deprived combustion gases within said tubular element to reduce the rate of combustion and minimizes release of smoke particles through said porous tubular member and restricts inward flow of air to reduce free-burn rate of the cigarette in combination with a filter element as claimed in claim 1.

Specification

The disclosure is objected to because of the following informalities: the status of the parent application needs to be updated on the first page of the written description by inserting its patent number.

Appropriate correction is required.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Thursday and alternate Fridays from 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Michael P Colaianni
Primary Examiner
Art Unit 1731

MPC
July 15, 2003

MICHAEL COLAIANNI
PRIMARY EXAMINER